

CLAIMS

- 5 1. Detergent composition, capable of exhibiting enhanced bleachable stain removal in the substantial absence of oxygen bleaches, containing surface-active agents, builders, conventional additives and optional components, characterized in that the composition
 10 comprises
 - I: of from 0.1 % to 5 % by weight of a fructan component selected from the group of:
- 15 (a) carboxyalkylinulin, wherein the alkyl moiety contains from 1 to 4 carbon atoms;
 - (b) dicarboxyinulin having a degree of oxydation from 10 % to 100 %, expressed as a molar percentage of
- 20 monosaccharide units converted into the corresponding analogues;
 - (c) 6-carboxyinulin; and
- 25 (d) fructan polycarboxylic acid, having a degree of oxidative substitution of from 0.2 to 2.0 and a degree of carboxyalkylation or carboxyacylation of from 0.2 to 3.0; and
- 30 II: of from 0.1 % to 5 % by weight of a phosphonate selected from the group of:
 - (i) $(R_2)_a N (R_1 PO_3H_2)_{n-a};$
- wherein R_1 is an alkylene group having from 1 to 4 carbon atoms, R_2 is an alkylene group having



from 1 to 8 carbon atoms, a is 0, or 2 and n is 1, 2 or 3;

(ii) phosphonobutane tricarboxylic acid;

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(iii) an alkylene polyphosphonate wherein the alkylene chain contains from 2 to 6 carbon atoms and the component contains at least two phosphonate groups;

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- (iv) an alkylene polyamino polyphosphonate; and
- (v) a mixture of such phosphonates.

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2. The composition in accordance with Claim 1 wherein the weight ratio of components I to II is in the range of from 20 : 1 to 1 : 6, preferably of from 10 : 1 to 1 : 4; more preferably of from 8 : 1 to 1 : 1

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3. The composition in accordance with Claim 1 wherein the alkylene polyamino polyphosphonate is represented by the following formula:

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$$Z_2N - (CH_2)_n - (CH_2)_n - N - (CH_2)_n - N - (CH_2)_n - NZ_2$$

$$Z_1 \times Z_2 \times Z_3 \times Z_4 \times Z_4 \times Z_4 \times Z_5 \times Z_5$$

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wherein

- Z is -CHR¹PO₃R₂
- R is H, CH_3 , C_2H_5 , or M;
- M is a metal ion or ammonium;
 - R¹ is H, CH₃, or CH₂COOH;



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n is 1-6, preferably 2-4;
m is 2-6, preferably 2-4;
x is 0-6, preferably 0-3;
y is 0-6, preferably 0-1.
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- 4. The composition in accordance with Claims 1 and 3 wherein the polyphosphonate is selected from the group of: ethylenediamino tetramethylenephosphonate; diethylene triamino pentamethylenephosphonate; dihexyleneethylene tetraamino hexamethylenephosphonate; bishexamethylene triaminopentamethylene phosphonate; phosphonobutane tricarboxylic acid; and amino(trismethylenephosphonic acid.
- 15 5. The composition in accordance with Claim 1 wherein the fructan component is selected from carboxyalkylinulin having 1 or 2 carbon atoms in the alkyl moiety and having a degree of substitution of from 1.5 to 2.8 and dicarboxyinulin having a degree of oxidation (DO) of from 20 % to 90 %.
- 6. The composition in accordance with Claims 1 and 5 wherein the fructan component is present in a level of 25 from 0.1 to 2.0 % by weight and the polyphosphonate is present in 0.1 to 2;0 % by weight.